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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,302	01/23/2001	Kazuyuki Sato	FUSA 18.263	3527

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EXAMINER

DENNISON, JERRY B

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 05/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

24

**Office Action Summary****Application No.**

09/767,302

**Applicant(s)**

SATO ET AL.

**Examiner**

J. Bret Dennison

**Art Unit**

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) 7-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date 2. | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This Action is in response to Application Number 09/767302 received on 23 January 2001.
2. Claims 1-9 are presented for examination.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanabe et al. (U.S. Patent Number 5,333,131) hereinafter referred to by Tanabe.

3. Regarding claim 1, Tanabe discloses a routing apparatus for obtaining routing data conforming to a destination address of a packet that arrives from a line, adding the routing data onto the packet, and switching the packet based upon the routing data to send the packet to a prescribed line, comprising:

a main controller having a routing data generator for generating routing data conforming to a requested destination address and sending the routing data to a requesting source (Tanabe, col. 6, lines 4-5);

a line interface for extracting a destination address from a packet that arrives from a line, generating routing-data request for requesting said main controller to be

notified of routing data conforming to this destination address, adding the routing data of which notification has been given by said main controller onto the packet and then outputting the packet (Tanabe, col. 5, lines 55-67 and col. 6, lines 4-60); and

a switch for sending the routing data request, which enters from a prescribed line interface, to the main controller, sending the routing data from said main controller to a line interface of the requesting source, and switching a packet with attached routing data based upon the routing data to thereby send the packet to another line interface (Tanabe, col. 6, lines 25-35).

4. Regarding claim 2, Tanabe teaches the features of the invention, substantially as claimed, as described in claim 1, including wherein said routing data generator of said main controller includes:

an associative memory for storing routing data (Tanabe, col. 9, lines 55-63);

a key-data memory for storing key data conforming to destination addresses (Tanabe, col. 13, lines 38-40);

a converter which, when key data conforming to the requested destination address exists in said key-data memory, is for converting this key data to an address of said associative memory (Tanabe, col. 13, lines 38-46); and

a routing-data sending unit for reading routing data out of the associative memory from this address and sending this routing data to the line interface that is the requesting source (Tanabe, col. 13, lines 40-42, Tanabe teaches the controller accessing the VP

table and selecting some originating transit lines on which the VP destined for the terminating local node is established).

5. Regarding claim 4, Tanabe teaches the features of the invention, substantially as claimed, as described in claim 2, including wherein said main controller has routing data generators that are associated with respective ones of line speeds (Tanabe, col. 6, lines 55-67);

said line interface adds a line identifier onto a destination address of a packet that arrives from a line so that the routing-data request is created and requests said main controller to be notified of routing data (Tanabe, col. 5, line 55 through col. 6, line 6); and

said main controller responds to the request by generating routing data from whichever routing data generator corresponds to a line speed indicated by the line identifier and sending this routing data to the line interface that is the requesting source (Tanabe, col. 5, line 55 through col. 6, line 6).

6. Regarding claim 5, Tanabe teaches the features of the invention, substantially as claimed, as described in claim 4, including wherein lines having any line speeds are connected to said line interface (Tanabe, col. 5, lines 58-61).

7. Regarding claim 6, Tanabe teaches the features of the invention, substantially as claimed, as described in claim 2, including wherein each line interface adds a key flag

onto a packet for the routing-data request to be sent to said main controller, adds a data flag onto a packet and inputs the result to said switch; and  
said switch sends the packet with the attached key flag to said main controller and sends the packet with the attached data flag to a line interface on the output side based upon the routing data (Tanabe, col. 6, lines 54-67, Tanabe teaches the line interfaces extracting routing data information for a read address and header information. col. 7, lines 43-67, Tanabe teaches that the switch responds to an output port number to which the input packet is to be delivered).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanabe in view of Segal (U.S. Patent Number 5,737,404).

8. Regarding claim 3, Tanabe teaches the features of the invention, substantially as claimed, as described in claim 2. However, Tanabe does not teach wherein said main controller is provided in duplicate to furnish a working main controller and a standby main controller;

when the working main controller updates content stored in each of said memories, said main controller updates also content stored in each of the memories of the standby main controller; and

when the working main controller develops a failure, the standby main controller continues routing control by serving as a new working main controller.

In an analogous art of networking, Segal teaches wherein all content is duplicated and forwarded to the standby processing module (Segal, col. 7, lines 25-50).

Tanabe and Segal are analogous art because both include transmitting data through a packet based network using a routing table in memory.

Therefore it would have been obvious to one in the ordinary skill in the art at the time of the invention to combine Tanabe with Segal to provide a system containing a standby controller for the benefit of backing up the main controller and being able to assume the active status in the event of the failure of the main controller (Segal, col. 8, lines 5-12).

### ***Allowable Subject Matter***

Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (703)305-8756. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (703)308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Bret Dennison  
Patent Examiner  
Art Unit 2143



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